

CLAIMS

1. A sealing gasket for closure, made of a polyurethane elastomer obtained by reacting the following (A), (B) and (C) :

5 (A) a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate,

(B) a polyol component having a hydroxyl value of 20
10 to 350 mgKOH/g and average 2 to 3 functional groups, and

(C) a glycerin fatty acid ester having hydroxyl group(s) .

2. A sealing gasket for closure according to Claim 1, wherein the (A) is a polyisocyanate component having an
15 isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to a uretdione-forming reaction, an isocyanurate-forming reaction and/or a urethanization reaction.

20 3. A sealing gasket for closure according to Claim 1, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate
25 according to an isocyanurate-forming reaction and/or a urethanization reaction.

4. A sealing gasket for closure according to Claim 1, wherein the (B) is a polyol component having a hydroxyl

value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of one or more high-molecular polyol(s).

5. A sealing gasket for closure according to Claim 1, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of a mixture of a high-molecular polyol and a low-molecular polyol.

6. A sealing gasket for closure according to Claim 1, wherein the polyurethane elastomer, when subjected to a retort treatment of 120°C x 30 minutes using 10 ml, per g of the polyurethane elastomer, of water, gives an extract showing a potassium permanganate consumption of 30 ppm or less.

7. A sealing gasket for closure according to Claim 1, wherein the polyurethane elastomer has a JIS A hardness of 10 to 70, a tensile strength of 1 to 40 MPa and a compression set of 0.1 to 60%.

8. A process for producing a closure, which comprises reacting the following (A), (B) and (C) at the inner side of a closure to synthesize a polyurethane elastomer in such a state that the polyurethane elastomer is integrated with the closure:

(A) a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate,

(B) a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, and

(C) a glycerin fatty acid ester having hydroxyl group(s) .

9. A process for producing a closure according to Claim 8, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to a uretdione-forming reaction, an isocyanurate-forming reaction and/or a urethanization reaction.

10. A process for producing a closure according to Claim 8, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to an isocyanurate-forming reaction and/or a urethanization reaction.

11. A process for producing a closure according to Claim 8, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of one or more high-molecular polyol(s) .

12. A process for producing a closure according to Claim 8, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of a mixture of a high-molecular polyol and a low-molecular polyol.

13. A process for producing a closure according to Claim 8, wherein the polyurethane elastomer, when subjected to a retort treatment of 120°C x 30 minutes using 10 ml, per g

of the polyurethane elastomer, of water, gives an extract showing a potassium permanganate consumption of 30 ppm or less.

14. A process for producing a closure according to Claim 5 8, wherein the polyurethane elastomer has a JIS A hardness of 10 to 70, a tensile strength of 1 to 40 MPa and a compression set of 0.1 to 60%.

15. A process for producing a closure, which comprises lining the inner side of a closure with the following (A), 10 (B) and (C) and then reacting the (A), the (B) and the (C) at 150 to 240°C for 20 to 200 seconds to synthesize a polyurethane elastomer in such a state that the polyurethane elastomer is integrated with the closure:

(A) a polyisocyanate component having an isocyanate 15 group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate,

(B) a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, and

20 (C) a glycerin fatty acid ester having hydroxyl group(s).

16. A process for producing a closure according to Claim 15, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 25 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to a uretdione-forming reaction, an isocyanurate-forming reaction and/or a urethanization reaction.

17. A process for producing a closure according to Claim 15, wherein the (A) is a polyisocyanate component having an isocyanate group content of 5 to 38% by weight and average 2 to 3 functional groups, obtained by modifying an aliphatic isocyanate and/or an alicyclic isocyanate according to an isocyanurate-forming reaction and/or a urethanization reaction.
18. A process for producing a closure according to Claim 15, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of one or more high-molecular polyol(s).
19. A process for producing a closure according to Claim 15, wherein the (B) is a polyol component having a hydroxyl value of 20 to 350 mgKOH/g and average 2 to 3 functional groups, consisting of a mixture of a high-molecular polyol and a low-molecular polyol.
20. A process for producing a closure according to Claim 15, wherein the polyurethane elastomer, when subjected to a retort treatment of 120°C x 30 minutes using 10 ml, per g of the polyurethane elastomer, of water, gives an extract showing a potassium permanganate consumption of 30 ppm or less.
21. A process for producing a closure according to Claim 15, wherein the polyurethane elastomer has a JIS A hardness of 10 to 70, a tensile strength of 1 to 40 MPa and a compression set of 0.1 to 60%.